

REMARKS

Applicant has cancelled claims 33 and 44-61, and amended claims 1 and 34. Claims 1-32, 34-38, 40, 41 and 62-65 are presented for examination.

Applicant acknowledges with appreciation the courtesy extended by Examiners Zirker and Chang in providing an interview on April 22, 2003.

The Examiner rejected claims 1-32, 34-38, 40, 41 and 60-65 under 35 U.S.C. §112, first paragraph as purportedly being based on a disclosure which is not enabling, and under 35 U.S.C. §112, second paragraph as purportedly being indefinite.

Respectfully, Applicant finds the rejections very difficult to understand because the Examiner seems to be confusing the different statutory requirements. As an example, under the paragraph one rejection, the Examiner stated that the claims "give no notice as to what compositions might infringe the claim[s]" and refers to the claims as reciting "vague" functionalities. Applicant notes that the "notice" function of the claims is served by the second paragraph, not the first paragraph, of the statute. In addition, the Examiner cited obscure caselaw out of context for the purpose of supporting general propositions which are not as broad as the Examiner seems to think they are. Applicant therefore respectfully requests clarification of the rejections under 35 U.S.C. §112 if the rejections are to be maintained.

Regarding the enablement rejection, as stated by the United States Court of Appeals for the Federal Circuit is Process Control Corp. v. Hydrex Corp., 190 F.3d 1350:

The enablement requirement of 35 U.S.C. §112, ¶ one requires that the specification adequately discloses to one skilled in the relevant art how to make, or in the case of a process, how to carry out, the claimed invention without undue experimentation.

Here, it is clear that one skilled in the art could readily make and use the invention without undue experimentation. The specification includes more than 20 pages of discussion regarding many different examples of Applicant's claimed compositions, as well as methods of making the compositions. Moreover, the specification includes 12 different specific examples of

Applicant's claimed compositions and their methods of preparation. Thus, it is apparent that the specification satisfies the enablement requirement with respect to the claims, and so Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. §112, first paragraph.

Regarding the indefiniteness rejection, Applicant reminds the Examiner of the appropriate legal standard for satisfying 35 U.S.C. §112, second paragraph. In Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1576 (Fed. Cir. 1986) the United States Court of Appeals for the Federal Circuit stated:

A decision whether a claim is invalid under §112, 2d paragraph, requires a determination of whether those skilled in the art would understand what is claimed when read the claim is read in light of the specification.

Here, one skilled in the art would clearly understand the claims when read in light of the specification. As an example, the Examiner stated that independent claims 1, 30 and 34 recite "vague 'functionalities'". However, the "functionalities" required by the claims are explicitly defined in the application at page 4, and one skilled in the art would understand what the "functionalities" cover after reading the specification. As another example, the Examiner stated that "the Examiner believes" that there should be certain limitations in the claims. Respectfully, what "the Examiner believes" is not the legal standard. The Examiner must demonstrate some legitimate basis to support the position that, even after reading the specification, one skilled in the art would not understand what the claims cover unless the claims recite the particular limitations suggested by the Examiner. Moreover, while the Examiner seems to indicate that there is some *per se* prohibition against using functional language in claims, Applicant respectfully notes that such a broad proposition is simply not supported by the caselaw. See, e.g., id. Accordingly, Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

The Examiner also rejected claims 1-32, 34-38, 40, 41 and 60-65 under 35 U.S.C. §103 as being unpatentable over Moulton.

Moulton is directed to electrically conducting adhesion promoters for enhancing the adhesion of composite electrodes onto conductive foils useful as current collectors. (Moulton col. 1, lines 11-15). The articles disclosed by Moulton essentially contain a three layer

combination of a foil and a composite electrode with an adhesive material therebetween. (See, e.g., id. col. 3, lines 20-55). Apparently, Moulton's adhesive can form an adhesive bond, but some sort of adhesive does not contain an electrolyte. (Id. col. 5, line 8-col. 7, line 2). Moreover, while Moulton's electrode can be a composite cathode that contains a polymer and a salt, this material does not appear to be capable of forming an adhesive bond to an electrically conductive surface. (Id. col. 8, lines 13-17). In short, nowhere does Moulton disclose a material that can form an adhesive bond having a shear strength of greater than 200 psi and that also has sufficient ionic conductivity to support a faradic reaction at an electrically conductive surface, where the faradic reaction weakens the adhesive bond. Thus, Moulton does not explicitly disclose Applicant's claimed compositions.

Nor has the Examiner met the appropriate standard to demonstrate that Moulton inherently discloses Applicant's claimed compositions. Applicant reminds the Examiner that the standard for meeting inherent anticipation is demanding. As the United States Court of Appeals for the Federal Circuit ruled in Electro Sys. S.A. v. Cooper Life Sciences, 34 F.3d 1048, 1052 (Fed. Cir. 1994):

The mere fact that a thing *may result* from a given set of circumstances is insufficient to prove anticipation. (citations omitted; emphasis original).

Rather, one asserting inherent anticipation must prove that the claimed features are:

necessarily present [in the prior art reference] and that it would be so recognized by persons of ordinary skill. (Id.).

Furthermore, there is there no suggestion to modify Moulton to provide such compositions. Rather, whereas the pending claims cover materials that can form an adhesive bond having a shear strength of greater than 200 psi and that have a certain level of ionic conductivity (e.g., so that the adhesive bond *weakens* under conditions of electrical current), Moulton is concerned with providing an adhesive material that can *strengthen* adhesion under conditions of electrical current. (See, e.g., id. col. 2, lines 19-35). Moreover, whereas Moulton is concerned with preparing materials having certain *electronic conductivity* properties, the

materials covered by the pending claims require particular *ionic conductivity* properties. As known to those skilled in the art, these can be two very different problems. Thus, one skilled in the art would have never considered Moulton in the first place, and even if one skilled in the art did somehow consider Moulton, that person would not have been motivated to modify Moulton's compositions to provide the compositions covered by the pending claims.

The Examiner referred to the Koga patent, apparently to support the idea that it is known that charge/discharge cycles weaken interfacial adhesion between the current collector and the electrode layer. However, the portion of Koga referred to by the Examiner (col. 1, lines 39-52) seems to relate to reduction in adhesion between a polymer binder and a thin metal foil when exposed to repeated current cycles. There does not appear to be any reference to the polymer binder containing an electrolyte (the electrolyte is described as being external to the polymer binder by virtue of the fact that the electrode, which is partially formed of the polymer binder, has its surface area increased to increase the contact area between the electrode and the electrolyte) (lines 25-27), so, even if the polymer binder were construed to correspond to the claimed "matrix functionality," Koga would still seem to be irrelevant because Applicant's claimed compositions require an electrolyte/electrolyte functionality.

In view of the foregoing, Applicant requests reconsideration and withdrawal of the rejection under 35 U.S.C. §103.

Applicant notes that one of the 1449 Forms attached to the Office Action was not initialed by the Examiner. Applicant believes the 1449 Form relates to paper 12 in the PTO version of the prosecution history of the subject application. Applicant respectfully requests the Examiner to consider the reference listed in this 1449 Form (Weinberg, U.S. Patent No. 3,679,534), if the Examiner has not already done so, and to provide an initialed copy of this 1449 to Applicant.

Applicant further notes that the Information Disclosure Statement originally mailed by Applicant on September 17, 2002, does not appear to have been considered by the Examiner because the corresponding 1449 Form was not attached to the Office Action. Applicant is therefore re-submitting this Information Disclosure Statement for consideration by the Examiner.